



2124
JFC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

A. Papathanasiou

Art unit: 2124

Serial No. 09/911,764

Examiner: DO. Chat C.

Filed: July 25, 2001

For: METHOD AND APPARATUS FOR DIVERSITY COMBINING AND CO-CHANNEL INTERFERENCE SUPPRESSION

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to USPTO communication dated April 23, 2004, please amend the application as follows:

IN THE CLAIMS:

Claim 1. (currently amended) [A method for adapting a] An adaptive linear system[s] to adapt a set of complex valued observations [with a Least Square Solver (LESS)] having adaptation parameters with complex-valued elements, comprising [the steps of]:

a complex Least Square Solver (LESS), having;

means for transforming [said] adaptation [parameters] observations from a complex arithmetic to two sets of real number arithmetic observations by means of binary orthogonalization transformation (BOT),

means for computing with two real number LESS [said] two sets of real number arithmetic adaptation parameters; and

means for transforming after said computing with LESS said two sets of real number [computation] adaptation parameters to a set of complex number arithmetic adaptation parameters using an inverse binary orthogonalization transform (IBOT).

Claim 2. (currently amended) The [method] adaptive linear system as described in claim 1, wherein said means of computing of said two sets of real number [arithmetic] LESS are applied in parallel.